CLAIMS

1. A composition for potentiating antioxidative activities, consisting essentially of:
   (a) at least one antacid component in an dose sufficient to elevate the pH in the stomach;
   (b) at least one antioxidant component in an dose sufficient to decrease free radical generation in the stomach; and, optionally,
   (c) at least one pharmaceutically acceptable carrier.
2. The composition according to claim 1, wherein the composition is capable of decreasing the generation of free radicals and peroxides in the stomach or esophagus more than the same dose of antioxidant in the absence of antacid.
3. The composition according to claim 2, wherein the composition has the ability to decrease at least two fold the concentration of free radicals and peroxides in the stomach or esophagus.
4. The composition according to claim 1, comprising at least two distinct antioxidants.
5. The composition according to claim 1, comprising at least two distinct antacids.
6. The composition according to claim 1, wherein the antacid amount is sufficient to elevate the pH in the stomach by at least one pH unit.
7. The composition according to claim 1, wherein the antacid component comprises at least one classical antacid selected from the group consisting of: aluminum carbonate, aluminum hydroxide, aluminum phosphate, aluminum hydroxy carbonate, dihydroxy aluminum sodium carbonate, aluminum magnesium glycinate, dihydroxy aluminum aminoacetate, dihydroxyaluminum aminoacetic acid, calcium carbonate, calcium phosphate, hydrated magnesium aluminate activated sulfate, magnesium aluminate, magnesium aluminosilicates, magnesium carbonate, magnesium

glycinate, magnesium hydroxide, magnesium oxide and magnesium trisilicate.

8. The composition according to claim 1, wherein the antacid component comprises at least one H_2-receptor antagonist selected from the group consisting of: cimetidine, ranitidine, famotidine and nizatidine .

9. The composition according to claim 1, wherein the antacid component comprises at least one proton pump inhibitor selected from the group consisting of: omeprazole, hydroxyomeprazole, lansoprazole esomeprazole, pantoprazole and rabeprazole sodium.

10. The composition according to claim 1, wherein the relative amount of the antacid in the composition is from about 5 to about 90% w/w of the total antacid and antioxidant weight.

11. The composition according to claim 10, wherein the relative amount of the antacid in the composition is from about 15 to about 80% w/w of the total antacid and antioxidant weight.

12. The composition according to claim 11, wherein the relative amount of the antacid in the composition is from about 40 to about 60% w/w of the total antacid and antioxidant weight.

13. The composition according to claim 1, wherein the antioxidant component comprises one or more ingredients selected from the group consisting of: polyphenols, buffering agents, reducing agents and plant-derived antioxidants.

14. The composition according to claim 13, wherein the antioxidant is a polyphenol selected from the group consisting of: chalcones; phenolic acid; anthocyanins; flavonol; flavanols; flavanones; flavanonols; hydrolyzed tannins; proanthocyanidin; phenolamine; lignans; lignine; betalains; stilbenes; cyclic diuterpenes; mono and sesquiterpenes; sesamolin and isoflavones.

15. The composition according to claim 1, wherein the relative amount of the antioxidant in the composition is from about 10 to about 95% w/w of the total antacid and antioxidant weight.

16. The composition according to claim 15, wherein the relative amount of the antioxidant in the composition is from about 20 to about 85% w/w of the total antacid and antioxidant weight.

17. The composition according to claim 16, wherein the relative amount of the antioxidant in the composition is from about 40 to about 60% w/w of the total antacid and antioxidant weight.

18. The composition according to claim 1, wherein the composition is provided in any physical form suitable for oral administration.

19. The composition according to claim 18, the composition having a physical form selected from the group consisting of: tablet, compressed tablet, spheroid, capsule, powder and suspension and liquid.

20. The composition according to claim 19, further comprising at least one ingredient selected from the group consisting of: filler, disintegrant, anticaking agent, film coating, coating solution, binder, stabilizer for solution or for solid forms, entericoating polymer, sweetening agent, glidant, flavor, color, lubricant and plasticizer.

21. A pharmaceutical composition, consisting essentially of:

(a) at least one pharmaceutically active ingredient;

(b) at least one antacid component in a dose sufficient to elevate the pH in the stomach;

(c) at least one antioxidant component in a dose sufficient to decrease free radical generation in the stomach; and, optionally,

(d) at least one pharmaceutically acceptable carrier, diluent or stabilizer.

22. The composition according to claim 21, wherein the composition is capable of decreasing the generation of free radicals and peroxides in the stomach or

the esophagus more than the same dose of antioxidant in the absence of antacid.

23. The composition according to claim 22, wherein the composition has the ability to decrease at least two fold the concentration of free radicals and peroxides in the stomach or esophagus.

24. The composition according to claim 23, comprising at least two distinct antioxidants.

25. The composition according to claim 21, comprising at least two distinct antacids.

26. The composition according to claim 25, wherein the antacid amount is sufficient to elevate the pH in the stomach by at least one pH unit.

27. The pharmaceutical composition according to claim 21, wherein the antacid component comprises at least one ingredient selected from the group consisting of: aluminum carbonate, aluminum hydroxide, aluminum phosphate, aluminum hydroxy carbonate, dihydroxy aluminum sodium carbonate, aluminum magnesium glycinate, dihydroxy aluminum aminoacetate, dihydroxyaluminum aminoacetic acid, calcium carbonate, calcium phosphate, hydrated magnesium aluminate activated sulfate, magnesium aluminate, magnesium aluminosilicates, magnesium carbonate, magnesium glycinate, magnesium hydroxide, magnesium oxide and magnesium trisilicate.

28. The pharmaceutical composition according to claim 21, wherein the antacid component comprises at least one H_2-receptor antagonist selected from the group consisting of: cimetidine, ranitidine, famotidine and nizatidine .

29. The pharmaceutical composition according to claim 21, wherein the antacid component comprises at least one proton pump inhibitor selected from the group consisting of: omeprazole, hydroxyomeprazole, lansoprazole, esomeprazole, pantoprazole and rabeprazole sodium.

30. The pharmaceutical composition according to claim 21, wherein the relative amount of the antacid in the composition is from about 5 to about 90% w/w of the total antacid and antioxidant weight.

31. The pharmaceutical composition according to claim 31, wherein the relative amount of the antacid in the composition is from about 15 to about 80% w/w of the total antacid and antioxidant weight.

32. The pharmaceutical composition according to claim 32, wherein the relative amount of the antacid in the composition is from about 40 to about 60% w/w of the total antacid and antioxidant weight.

33. The pharmaceutical composition according to claim 21, wherein the antioxidant component comprises one or more ingredients selected from the group consisting of: polyphenols, buffering reducing agents and plant-derived antioxidants.

34. The pharmaceutical composition according to claim 33, wherein the antioxidant is a polyphenol selected from the group consisting of: chalcones; phenolic acid; anthocyanins; flavonol; flavanols; flavanones; flavanonols; hydrolyzed tannins; phenolamine; lignans; lignine; betalains; stilbenes; cyclic diuterpenes; sesamolin and isoflavones.

35. The pharmaceutical composition according to claim 21, wherein the relative amount of the antioxidant in the composition is from about 10 to about 95% w/w of the total antacid and antioxidant weight.

36. The pharmaceutical composition according to claim 35, wherein the relative amount of the antioxidant in the composition is from about 20 to about 85% w/w of the total antacid and antioxidant weight.

37. The pharmaceutical composition according to claim 36, wherein the relative amount of the antioxidant in the composition is from about 40 to about 60% w/w of the total antacid and antioxidant weight.

38. The pharmaceutical composition according to claim 21, wherein the at least one pharmaceutically active ingredient is vulnerable to oxidative damage.

39. The pharmaceutical composition according to claim 21, wherein the at least one pharmaceutically active ingredient is a hormone or an antibiotic agent.

40. The pharmaceutical composition according to claim 21, wherein the composition is provided in any physical form suitable for oral administration.

41. The pharmaceutical composition according to claim 40, the composition having a physical form selected from the group consisting of: tablet, compressed tablet, spheroid, capsule, powder, suspension and liquid.

42. The pharmaceutical composition according to claims 41, further comprising at least one ingredient selected from the group consisting of: filler, disintegrant, anticaking agent, film coating, coating solution, binder, stabilizer for solution or for solid forms, sweetening agent, glidant, flavor, color, lubricant and plasticizer.

43. The pharmaceutical composition according to claims 21, wherein the composition is a nutraceutical consisting essentially of non-prescription active ingredients.

44. A method for protection from oxidative damage, comprising administering to a subject a composition consisting essentially of: (a) at least one antacid component in a dose sufficient to elevate the pH in the stomach; (b) at least one antioxidant component in a dose sufficient to decrease free radical generation in the stomach; and, optionally (c) at least one carrier, diluent or stabilizer.

45. A method for inhibiting peroxidation reactions in the GI tract, comprising administering to a subject a composition consisting essentially of: (a) an antacid component in a dose sufficient to elevate the pH in the stomach; (b) an antioxidant component in a dose sufficient to decrease free radical generation in the stomach; and, optionally (c) a carrier, diluent or stabilizer.

46. A method for attenuating generation of free radicals and peroxides in the GI tract comprising administering to a subject a composition consisting essentially of: (a) at least one antacid component in a dose sufficient to

elevate the pH in the stomach; (b) at least one antioxidant component in a dose sufficient to decrease free radical generation in the stomach; and, optionally (c) a carrier, diluent or stabilizer.

47. The method according to any one of claims 44 to 46, wherein the composition is administered to a subject before a meal or in parallel to a meal.

48. The method according to any one of claims 44 to 46, wherein the composition is administered to a subject in need thereof several times a day.

49. The method according to any one of claims 44 to 46, wherein the composition is administered orally.

50. The method according to any one of claims 44 to 46, wherein the antacid component comprises at least one ingredient selected from the group consisting of: aluminum carbonate, aluminum hydroxide, aluminum phosphate, aluminum hydroxy carbonate, dihydroxy aluminum sodium carbonate, aluminum magnesium glycinate, dihydroxy aluminum aminoacetate, dihydroxyaluminum aminoacetic acid, calcium carbonate, calcium phosphate, hydrated magnesium aluminate activated sulfate, magnesium aluminate, magnesium aluminosilicates, magnesium carbonate, magnesium glycinate, magnesium hydroxide, magnesium oxide and magnesium trisilicate.

51. The composition according to any one of claims 44 to 46, wherein the antacid component comprises at least one H_2-receptor antagonist selected from the group consisting of: cimetidine, ranitidine, famotidine and nizatidine.

52. The composition according to any one of claims 44 to 46, wherein the antacid component comprises at least one proton pump inhibitor selected from the group consisting of: omeprazole, hydroxyomeprazole, lansoprazole, esomeprazole, pantoprazole and rabeprazole sodium.

53. The method according to any one of claims 44 to 46, wherein the relative amount of the antacid in the composition is from about 5 to about 90% w/w of the total antacid and antioxidant weight.

54. The method according to claim 53, wherein the relative amount of the antacid in the composition is from about 15 to about 80% w/w of the total antacid and antioxidant weight.

55. The method according to claim 54, wherein the relative amount of the antacid in the composition is from about 40 to about 60% w/w of the total antacid and antioxidant weight.

56. The method according to any one of claims 44 to 46, wherein the antioxidant component comprises one or more ingredients selected from the group consisting of: polyphenols, reducing agents and plant-derived antioxidants.

57. The method according to claim 56, wherein the antioxidant is a polyphenol selected from the group consisting of: chalcones; phenolic acid; anthocyanins; flavonol; flavanols; flavanones; flavanonols; hydrolyzed tannins; phenolamine; lignans; lignine; betalains; stilbenes; cyclic diuterpenes; sesamolin and isoflavones.

58. The method according to any one of claims 44 to 46, wherein the relative amount of the antioxidant in the composition is from about 10 to about 95% w/w of the total antacid and antioxidant weight.

59. The method according to claim 59, wherein the relative amount of the antioxidant in the composition is from about 20 to about 85% w/w of the total antacid and antioxidant weight.

60. The method according to claim 60, wherein the relative amount of the antioxidant in the composition is from about 40 to about 60% w/w of the total antacid and antioxidant weight.

61. The method according to claim 49, wherein the composition having a physical form selected from the group consisting of: tablet, compressed tablet, spheroid, capsule, suspension, powder and liquid.

62. The method according to any one of claims 44 to 46, wherein the composition is administered as a nutraceutical consisting essentially of non-prescription active ingredients.